

CLAIMS

What is claimed is:

1. A locking door assembly; comprising, a door member mounted to a door frame
5 and moveable between at least an open and closed position;
a lock assembly having a central lock member positioned in the door member,
and at least one actuator member connected to the central lock member and moveable along an
axis of extension between a first position and second position; and
an extension bolt having an elongated body extending along an extension bolt
10 axis, and having a proximal end connected to the actuator member and a distal end with a
projection configured to mate with a receiver for locking the door in position, said connection of
the actuator to the extension bolt including an intermediate portion with a length extending
generally transverse to said extension bolt axis and defining an extent of separation of the
extension bolt axis from the actuator axis and at least an extent of the extension bolt passing
15 through an interior portion of the door member.
2. The assembly of Claim 1 wherein, the intermediate portion comprises an adaptor
with a body length located between the actuator and the extension bolt, said body length
defining a separation distance between the actuator axis of extension and the extension bolt
20 axis.
3. The assembly of Claim 2 wherein, the adaptor has a first end connected to the
actuator and a second end connected to the extension bolt.
- 25 4. The assembly of Claim 2 wherein, the adaptor has a first end with a projection
configured for mating connection to the actuator, and a second end with threading configured
for mating securement with the extension bolt.
5. The adaptor of Claim 1 wherein the length of the adaptor body is a fixed length.
- 30 6. The adaptor of Claim 5 wherein the length of the adaptor body is approximately
 $\frac{1}{2}$ inch.

7. The adaptor of Claim 6 wherein the adaptor body length is between 1/4 inch and 3/4 inch.

8. The assembly of Claim 1 wherein a second adaptor is secured to a second
5 extension bolt positioned along the extension bolt axis, said second adaptor having an intermediate portion with a length extending transverse to said extension bolt axis.

9. The assembly of Claim 1 wherein the intermediate portion of said connection of
the actuator to the extension bolt is configured for alternate connection by a user, said alternate
10 connection including a first configuration of connection whereby the axis of the extension bolt is in substantial alignment with the actuator axis, and a second configuration whereby the axis of the extension bolt resides a distance away from the actuator axis.

10. The assembly of Claim 9 wherein the actuator is secured directly to the extension
15 bolt when the assembly is in the first configuration.

11. A multi-point lock assembly for a door member mounted to a door frame and moveable between an open configuration and a closed configuration, comprising;

a central lock assembly having at least one actuator member moveable along an axis of
20 movement between a first position and second position;

an extension bolt having an elongated body extending along an extension bolt axis, and having a proximal end connected to the actuator member by an adaptor, said adaptor having a body portion residing between a first end and a second end, the body portion having a length extending generally transverse the extension bolt axis to displace the extension bolt axis a
25 distance away from the actuator axis.

12. The lock assembly of Claim 11 wherein the first end of the adaptor is connected to the actuator and the second end is connected to the extension bolt, said length of the body portion being defined by a distance between said first and second ends of the adaptor.

13. The lock assembly of Claim 12 wherein the first end of the adaptor has a projection configured for mating connection to the actuator, and the second end of the adaptor has threading configured for mating threaded securement to the extension bolt.

5 14. The lock assembly of Claim 11 wherein a second adaptor is secured to a second extension bolt positioned along a second extension bolt axis, said second adaptor having a body portion with a length extending transverse to said second extension bolt axis.

10 15. The lock assembly of Claim 11 wherein connection of the extension bolt to the actuator is configured for alternate connection by a user, said alternate connection including a first configuration of connection whereby the axis of the extension bolt is in substantial alignment with the actuator axis, and a second configuration whereby the axis of the extension bolt resides a distance away from the actuator axis.

15 16. An adaptor for connecting an extension bolt to a central lock device of a multi-point lock assembly for a door, comprising;
an adaptor body having a first end with a means for connection to a mating portion of a moveable actuator member of a central lock member, and a second end with a means for connection to an elongated extension bolt, the adaptor having a body length between said first end and said second end, said body length extending transverse to the elongated extension bolt,
20 said length providing an extent of positioning the elongated extension bolt in spaced relationship from the actuator.

25 17. The adaptor of Claim 16 wherein the means for connecting the adaptor first end to an actuator member includes a projection at said first end configured to mate with a receiver of the actuator member.

30 18. The adaptor of Claim 16 wherein the means for connecting the second end of the adaptor to the elongated extension bolt includes threaded fastener arrangement between the adaptor and the extension bolt.

19. The adaptor of Claim 18 wherein the second end has internal threading configured to mate with a threaded end portion of the extension bolt.

20. The adaptor of Claim 16 wherein the first end of the adaptor is configured for
5 removable connection to the actuator.

21. The adaptor of Claim 16 wherein the second end of the adaptor is configured for removable connection to the extension bolt.

10 22. The adaptor of Claim 16 wherein the length of the adaptor body is a fixed length.

23. The adaptor of Claim 22 wherein the length of the adaptor body is approximately
1/2 inch.

15 24. The adaptor of Claim 23 wherein the adaptor body length is between 1/4 inch and 3/4 inch.

25. The lock assembly of Claim 16 wherein the assembly is configured for alternate connection of the actuator and the extension bolt, whereby said alternate connection includes a
20 first configuration of connection whereby the extension bolt is connected directly to the actuator, and a second configuration of connection whereby the adaptor joins the extension bolt to the actuator to position an axis of the elongated extension bolt in spaced relationship from an axis of movement of the actuator.

25 26. An adaptable door lock assembly for a multi-point locking arrangement of a door to a door frame, comprising;

a central lock unit having a movable actuator member with an axis of movement between an extended position and a retracted position, said actuator member being connected to an extension bolt extending along a bolt axis,

30 the connection of the actuator member to the extension bolt being configured for alternate connection by a user, the alternate connection including a first configuration whereby

the axis of the actuator is in alignment with the bolt axis, and a second configuration whereby the axis of the actuator resides a distance away from the bolt axis.

27. The lock assembly of Claim 26 wherein connection of the actuator member to the extension bolt in the second configuration includes an adaptor body having a first end connected to the actuator member and a second end connected to the extension bolt, said adaptor body having a length between the first and second ends, said length defining the distance said actuator axis is positioned way from the bolt axis.

28. The lock assembly of Claim 27 wherein the adaptor is connected to the actuator member by mating connection of a projection with a recess.

29. The lock assembly of Claim 27 wherein the adaptor is connected to the extension bolt by mating connection of a projection with a receiver.

30. The lock assembly of Claim 29 wherein the adaptor is connected to the extension bolt by insertion of the projection into the receiver in threaded arrangement.

31. The lock assembly of Claim 26 wherein the central lock unit has an exposed side configured to position along an edge of a door, and said actuator member is located adjacent said exposed side.

32. The lock assembly of Claim 31 wherein the extension bolt is adjacent the exposed side.

33. The lock of Claim 31 wherein in the second configuration, the extension bolt axis resides a distance away from the exposed side of the lock, such that said bolt axis to passes through an interior portion of a door.